

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) 14 JULY 2005 (14.07.2005)

Applicant's or agent's file reference
GP11000-PC

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/KR2005/000389

International filing date (day/month/year)

11 FEBRUARY 2005 (11.02.2005)

Priority date(day/month/year)

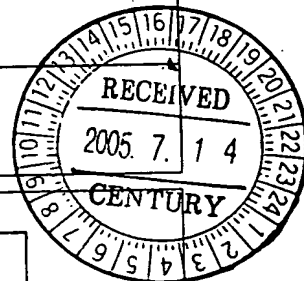
10 FEBRUARY 2004 (10.02.2004)

International Patent Classification (IPC) or both national classification and IPC

IPC7 H04B 1/38

Applicant

LEE, HanSang



1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

사건대장입력

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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PCT/KR2005/000389

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-42	YES
	Claims		NO
Inventive step (IS)	Claims	15-25	YES
	Claims	1-14, 26-42	NO
Industrial applicability (IA)	Claims	1-42	YES
	Claims		NO

2. Citations and explanations :

Reference is made to the following document.

D1 : KR 2004-0008240, 2004.1.28 A(Shell-Line co.ltd) 28. January 2004

1. Novelty(PCT Article 33(2)):

D1 does not disclose all the technical components regarding a sliding mechanism apparatus and appliance integrated with the same described in the present invention. Therefore, claims 1-42 meet the criteria set out in PCT Article 33(2).

2. Inventive Step (PCT Article 33(3)):

Claims 1-14, 26-42 of the present invention relate to an application using an apparatus and method for sliding opening & closing which is suitable for producing a slim and compact portable phone since the ratio of the moving distance is larger than the width of a slider member. This invention is disposed in a space between the guide member and a slider member. The guide member guides for a slide member to slide and a slider member is coupled to the guide member so as to slide thereon in a linear direction.

The technical feature of the present invention is characterized by having a first torsion spring and a second torsion spring. In a first torsion spring, the end of one of the two first arms is connected to a first position placed near a left edge of the guide member and the end of the other first arm is connected to a second position placed within a right half are of the slider member. In a second torsion spring, the end of one of the two second arms is connected to a third position placed near a right edge of the guide member and the end of the other second arm is connected to a fourth position placed within a left half area of the slider member.

continued on supplemental box

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

D1 discloses a slim-type slider phone which is slim and capable of sliding movement, comprising the following parts: a first slide panel(S1) formed on the upper housing of the main part; a metallic hinge plate(145) attached to the first slide panel; a rail guide(140) which is attached to a hinge plate(145) by the laser welding, and both ends of which are bent in a shape of U and have a T-shaped slot; a second slide panel(S2) including a projecting part where a projection is formed toward the first slide panel; a movement rail(130) which is attached to the projecting part by the laser welding; a torsion spring(150) mounted in a space between the rail guides, in which the end of one of the two arms is connected near the left & right edges of the second slide panel and the other end is fixed near the center of the hinge plate.

Therefore, the subject matter of claims 1-14, 26-42 does not fulfill the requirements of Article 33(3) PCT.

3. Industrial Applicability (PCT Article 33(4)):

Claims 1-42 meet the criteria set out in PCT Article 33(4) because the subject matter of the said claims is industrially applicable.